

Notice of Allowability

Application No.

09/707,604

Examiner

Aaron C Perez-Daple

Applicant(s)

HWU ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 9/24/04.
2. ☒ The allowed claim(s) is/are 23-27 and 34-43.
3. ☒ The drawings filed on 12 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOHN FOLLANSBEE
SENIOR PATENT EXAMINER
ART UNIT 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Richard Himelhoch (Reg. 35,544) on 2/1/05.

3. The application has been amended as follows:

In the Claims:

I. Claim 23 (currently amended):

A control system comprising:

a host processor;

a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller including a first central processing unit module connected to a second module via a first backplane;

a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller including a third central processing unit module connected to a fourth module via a second backplane; and

a fiber optic cable connecting the first module of the first controller and the third module of the second controller;

wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the

second backplane, the transfer being in response to detecting an error associated with the first controller.

II. Claim 34 (currently amended):

A control system comprising:

a host processor;

a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller being connected to a first backplane and including a first computer processing unit module;

a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller being connected to a second backplane and including a first computer processing unit module; and

a fiber optic cable connecting the first computer processing unit module of the first controller and the first computer processing unit module of the second controller;

wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

III. Claim 35 (currently amended):

A control system as defined in claim 34, wherein the first computer processing unit module of the first controller comprises:

a processor;

a co-processor;

an operating system executed by the processor; and

a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first controller and the second controller.

IV. Claim 39 (currently amended):

An active standby control system comprising:

a host processor unit;

a first controller communicatively coupled to the host processor unit, the first controller including a first module having a processor and a transfer port, and a second module connected to the first module by a backplane, the first controller further communicatively coupled to a plurality of remote Input-Output (IO) I/O drops;

a second controller communicatively coupled to the host processor unit, the second controller including a first module having a processor and a transfer port, and a second module connected to the first module by a backplane, the second controller further communicatively coupled to the plurality of remote IO drops; and

a cable connected to the transfer port of the first module of the first controller and connected to the transfer port of the first module of the second controller for transferring data between the first module of the first controller and the first module of the second controller and not via either one of the backplane of the first controller and the backplane of the second controller, the transfer being in response to detecting an error associated with the first controller and for the purpose of switching to the second controller.

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4. The following is an examiner's statement of reasons for allowance: The prior art in record does not teach or suggest a standby control system having all the claimed limitations including transferring data (i.e. the network identifier) of the first controller to the second controller via a cable directly connecting the central processing unit module of the first controller with the central processing unit module of the second controller, thereby bypassing the backplanes of the first and second controllers. Therefore, the present invention teaches an improved standby control system.
5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

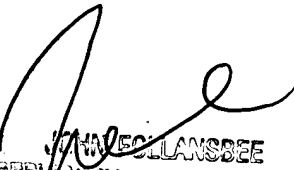
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 2/2/05

Aaron Perez-Daple


JOHN HOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100